

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph on page 4 beginning at line 5 as follows:

On the other hand, when a joined image for stereo display is output on a 2-dimensional display device, there is no definite method for generating a joined image into a 2D display image. Therefore, an identical output result cannot be obtained between image reproduction devices.

Please amend the paragraph on page 7 beginning at line 5 as follows:

The image coding apparatus according to the present invention is characterized by inclusion of a 2-dimensional display image generating method coding means for coding a method of generating a 2-dimensional display image from the joined image data. In this case, the apparatus is also characterized by inclusion of a 2-dimensional display image generating method selecting means for selecting the method of generating the 2-dimensional display image from the joined image data, disposed on an upstream of the 2-dimensional display image generating method coding means.

Please amend the paragraph on pages 7-8 beginning at line 15 as follows:

According to the present invention, an image decoding apparatus for decoding coded data of joined image data and 2-dimensional display image generating method information, the joined image data being formed by joining a plurality of images data corresponding respectively to a plurality of viewpoints, in a predetermined joining method, includes: a decoding means for decoding the joined image data; a 2-dimensional display image generating method decoding means for decoding the 2-dimensional display image generating method information; and a 2-dimensional display image generating means for generating a 2-dimensional display image, using a decoded image data and a decoded 2-dimensional display image generating method information. Further, in the image decoding apparatus having a display generating means, the

apparatus is characterized by inclusion of a ~~2-dimensional~~-dimensional display image generating method decoding means for decoding ~~2-dimensional~~-dimensional display image generating method information; and a ~~2-dimensional~~-dimensional display image generating means for generating a 2-dimensional display image, using the decoded image data, the decoded joining method information and a decoded ~~2-dimensional~~-dimensional display image generating method information, instead of the display data generating means.

Please amend the paragraph on pages 8-9 beginning at line 25 as follows:

In the above recording medium, the invention is characterized in that, when the coded data represents a stereo image, the header portion further stores information indicating a method of generating a ~~2-dimensional~~-dimensional display image from the coded data.

Please amend the paragraph on page 9 beginning at line 8 as follows:

The invention is characterized by inclusion of a display means capable of switching between a stereo representation and a ~~2-dimensional~~-dimensional representation.

Please amend the paragraph on page 9 beginning at line 11 as follows:

The invention is characterized in that automatic switching is done between the stereo representation and the ~~2-dimensional~~-dimensional representation, based on the information stored in the header portion.

Please amend the paragraph on page 9 beginning at line 15 as follows:

According to the present invention, an image recording apparatus for recording a plurality of images data corresponding respectively to a plurality of viewpoints, into a predetermined recording area, includes: a joining means for joining the plurality of images data

using a predetermined joining method; and a joining method coding means for coding information of the joining method, and is characterized in that the recording area includes: an image recording sector for recording a joined image data or a ~~2-dimensional~~2-dimensional image data; an audio recording sector for recording an audio data; and a subcode area for recording an associated information.

Please amend the paragraph on page 10 beginning at line 1 as follows:

According to the present invention, an image recording apparatus for recording a plurality of images data corresponding respectively to a plurality of viewpoints, into a predetermined recording area, includes: a joining means for joining the plurality of images data using a predetermined joining method; and a joining method coding means for coding information of the joining method, and is characterized in that the recording area includes an image recording sector for recording a joined image data or a ~~2-dimensional~~2-dimensional image data, and the coded data of the information of the joining method is recorded in the image recording sector.

Please amend the paragraph on page 11 beginning at line 8 as follows:

According to the present invention, an image recording apparatus for recording a plurality of images data corresponding respectively to a plurality of viewpoints, into a recording area, includes: a joining means for joining the plurality of images data using a predetermined joining method; and a ~~2-dimensional~~2-dimensional display image generating method coding means for encoding a method of generating a 2-dimensional display image from a joined image data, and is characterized in that the recording area includes: an image recording sector for recording the joined image data or the ~~2-dimensional~~2-dimensional image data; an audio recording sector for

recording an audio data; and a subcode sector for recording an associated information.

Please amend the paragraph on page 11-12 beginning at line 21 as follows:

According to the present invention, an image recording apparatus for recording a plurality of images data corresponding to multiple viewpoints, into a recording area, includes: a joining means for joining the multiple images of data using a predetermined joining method; and a 2-dimensional display image generating method coding means for encoding a method of generating a 2-dimensional display image from a joined image data, and is characterized in that the recording area includes an image recording sector for recording the joined image data or a 2-dimensional display image data, and a coded data of information of generating the 2-dimensional display image is recorded in the image recording sector.

Please amend the paragraph on page 12 beginning at line 9 as follows:

According to the present invention, an image recording apparatus for recording a plurality of images data corresponding respectively to a plurality of viewpoints, into a recording area, includes: a joining means for joining the plurality of images data using a predetermined joining method; and a 2-dimensional display image generating method coding means for encoding a method of generating a 2-dimensional display image from a joined image data, and is characterized in that the recording area includes an audio recording sector for recording an audio data, and a coded data of information of generating the 2-dimensional display image is recorded in the audio recording sector.

Please amend the paragraph on pages 12-13 beginning at line 21 as follows:

According to the present invention, an image recording apparatus for recording a

plurality of images data corresponding respectively to a plurality of viewpoints, into a recording area, includes: a joining means for joining the plurality of images data using a predetermined joining method; and a 2-dimensional display image generating method coding means for encoding a method of generating a 2-dimensional display image from a joined image data, and is characterized in that the recording area includes a subcode sector for recording an associated information, and a coded data of information of generating the ~~2-dimensional~~ dimensional display image is recorded in the subcode recording sector.

Please amend the paragraph on page 14-15 beginning at line 25 as follows:

According to the image coding apparatus of the present invention, the method of generating a ~~2-dimensional~~ dimensional display image from the joined image for stereo display is coded together with the joined image, whereby it is possible to output a definite ~~2-dimensional~~ dimensional display image that is common between different image decoding apparatuses.

Please amend the paragraph on page 15 beginning at line 6 as follows:

According to the image decoding apparatus of the present invention, when the method of generating a ~~2-dimensional~~ dimensional display image was encoded together, it is possible to obtain a ~~2-dimensional~~ dimensional display image that is not dependent on the image decoding apparatus, from the decoded result of the joined image and the ~~2-dimensional~~ dimensional display image generating method.

Please amend the paragraph on page 15 beginning at line 12 as follows:

According to the recording medium of the present invention, the stereo-image identification information that indicates the entity of a stereo image and the joining method

thereof, the control information that indicates the ~~2-dimensional~~-dimensional display image generating method and the like are also encoded and recorded or transmitted, together with the joined image of the stereo image, whereby it is possible to perform image display suited to the decoding apparatus side.

Please amend the paragraph on page 16 beginning at line 5 as follows:

According to the image recording apparatus of the present invention, since the joining method information and the information of generating a ~~2-dimesional~~-dimensional display image are recorded in the image sector and the audio sector, there is no fear of the these pieces of information being changed accidentally even when the subcode sector is rewritten by post-recording. Alternatively, when all pieces of coded information data are stored into one storage area, all pieces of the associated information relating to the image are gathered in one place, bringing an advantage of easy handling though easiness of post-recording cannot be obtained. This may also make it no longer necessary to handle the subcode sector.

Please amend the paragraph on page 16 at line 18 as follows:

According to the image recording apparatus of the present invention, since the joining method information and the information of generating a ~~2-dimetsional~~-dimensional display image are recorded into the subcode sector in the recording area, the subcode recording sector can be recorded by post-recording, hence can be modified easily.

Please amend the paragraph on pages 28-29 beginning at line 18 as follows:

Display data generator 404 generates display data from the decoded joined image, in accordance with the decoded joining method. For example, stereo images are joined by the

joining method (b) of Fig.2 and coded, and when only the right image is displayed on a 2-dimensional display device, the right half of the decoded joined image is inverted so as to produce the original right image, which is used as the data for display. In this case, since the right image is an image, which was sub-sampled with respect to the horizontal direction, the number of pixels in the horizontal direction needs to be doubled by interpolation to achieve actual display. On the other hand, when the left and right images are used to display on a stereo display device, display data is generated in conformity with the display format of the stereo display device.